traxon

USER MANUAL

MEDIA TUBE RGB

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FOR YOUR OWN SAFETY AND THAT OF THE PRODUCT, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE BEGINNING SETUP AND INSTALLATION.

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measure.

1. INTRODUCTION

MEDIA TUBE RGB DIRECT VIEW	MEDIA TUBE RGB DIFFUSED	Length
TU.CR.0014000	TU.DR.0014001	495mm
TU.CR.0114000	TU.DR.0114001	995mm
TU.CR.0214000	TU.DR.0214001	1495mm

The Traxon Media Tube RGB is an IP66/IP67-rated slim LED tube for any wall or facade media lighting. Available in 495mm, 995mm, and 1495mm lengths, the simple but robust construction, allows up to 10m of tubes to be daisy chained on a single power run.

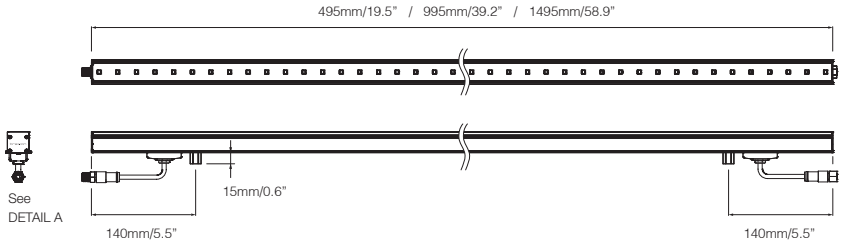
The tube is controllable by DMX or e:pix (DVI capable) with auto-adddressing to the next tube in the daisy chain.

The Media Tube RGB is housed in aluminium extrusion with clear silicon potting for direct view or with a diffused PC cover.

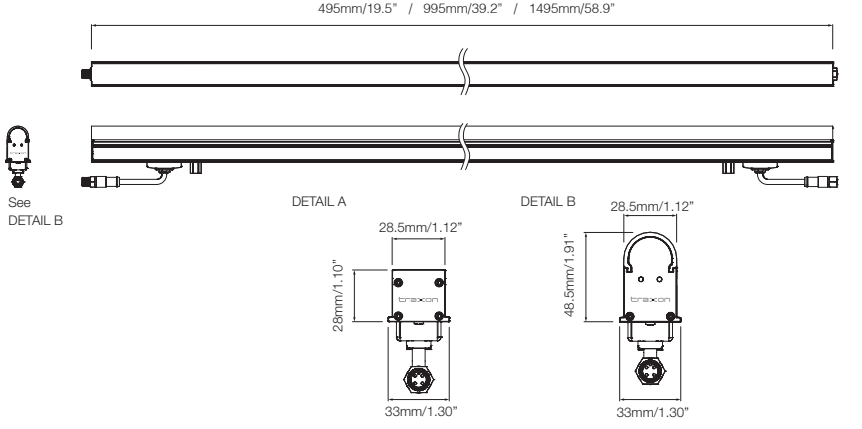
Features:

- Available lengths: 495mm (20PXL), 995mm (40PXL), and 1495mm (60PXL)
- Direct View or Diffused
- DMX/e:pix Control
- Daisy Chain System
- Auto-Addressing
- SMART CHIP™ Technology
- Outdoor Applications (IP66/IP67-rated)

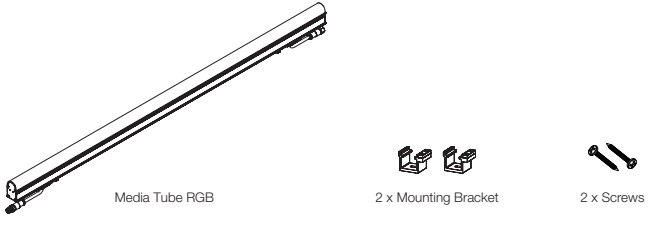
MEDIA TUBE RGB DIRECT VIEW



MEDIA TUBE RGB DIFFUSED



2. PACKING CONTENTS



3. SAFETY AND OPERATION

CAUTION – UNPLUG THE POWER SUPPLY FROM THE MAINS POWER BEFORE CONNECTING ANY CABLES AS THIS CAN DAMAGE THE PRODUCTS.

CAUTION – AVOID LOOKING DIRECTLY INTO THE LED LIGHT SOURCE AT CLOSE RANGE FOR YOUR OWN SAFETY.

ANY PERSONS INSTALLING THIS PRODUCT SHOULD COMPLY WITH LOCAL STANDARDS AND REGULATIONS AND MUST BE QUALIFIED FOR THE HANDLING OF ELECTRICAL EQUIPMENT.

This product is designed for indoor and outdoor use.

Ensure product operates within the specified temperature range.

If the fixture has been subjected to drastic temperature variances, for example, following transportation, do not connect the fixture until it has reached room temperature, as moisture condensation may cause electric shock and product damages.

When installing the fixtures and system power supplies, please ensure they will not be exposed to moisture and extreme heat (and direct sunlight for outdoor products). Besides, keep a clean operating environment for the fixtures and system power supplies.

Please study this User Manual thoroughly and check the latest Technical Specification Sheets available from our website [www.traxontechnologies.com] before setup.

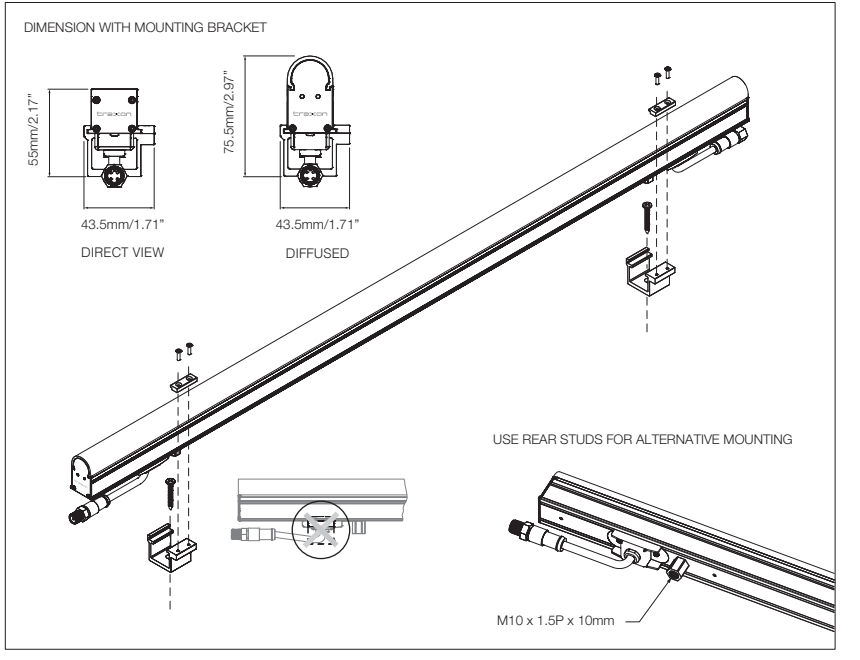
4. MOUNTING

Plan your installation before mounting the Tube. The following should be considered for a successful installation.

- Installation distances and choose appropriate cable lengths.
- Appropriate anchor bolts where necessary to secure the fixture.
- The number of fixtures and choose appropriate power sources.
- DMX/e:pix controller to be used to control the fixtures.

FIG 1 shows a typical mounting method of the Tube using screws.

FIG 1: Mounting the Tube

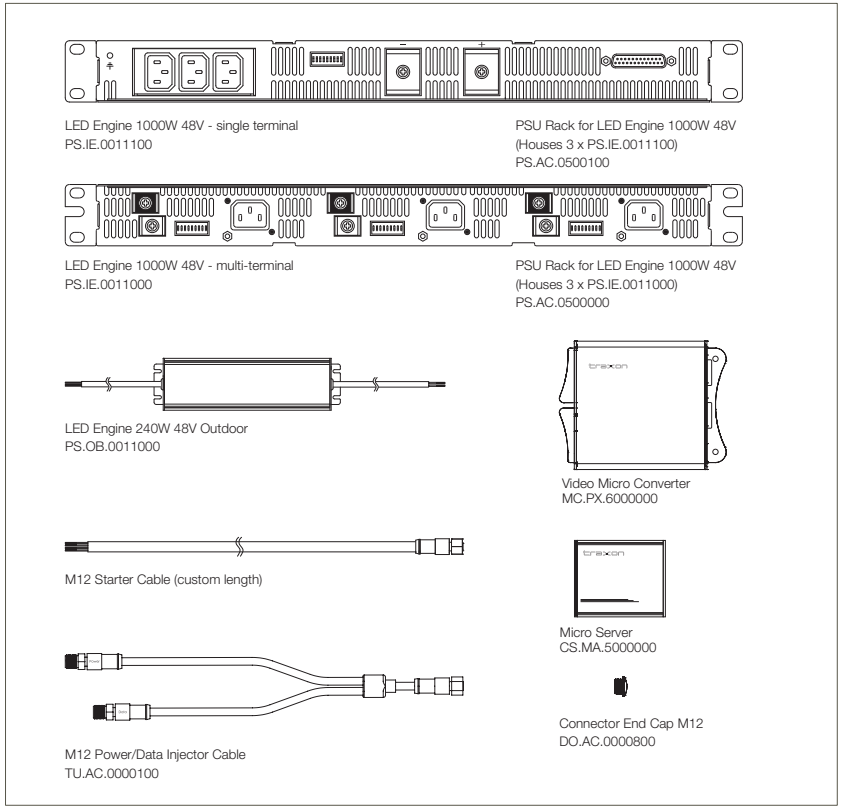


5. SYSTEM CONFIGURATION

5.1 MEDIA TUBE RGB CONNECTION COMPONENTS

The Media Tube RGB is connected using a daisy chain system with power and data on the same cable. FIG 2 shows some typical components for Media Tube RGB system.

FIG 2: Connection Components for Media Tube RGB System

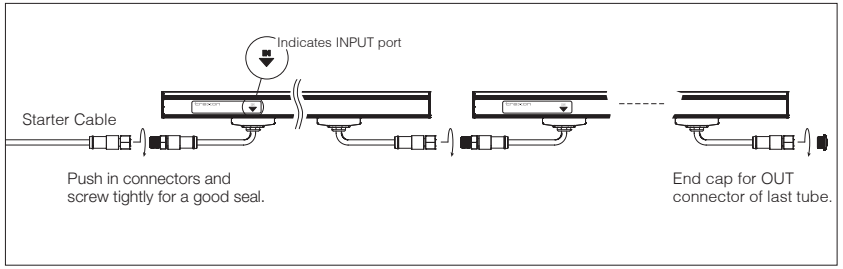


5.2 MEDIA TUBE RGB CONNECTION

The Tubes are interconnected using the IN and OUT cables on each end of the tube. Screw the connectors tightly for a water-tight seal. FIG 3 shows the Tube connections.

See FIG 4 and FIG 5 for typical system wiring.

FIG 3: Tube RGB Connections



5.3 LED CONTROL

The LEDs on the Media Tube RGB are controlled by DMX/e:pix. Each pixel on the Tube uses 3 channels, for R, G, and B. Pixel number 1 is at the end of the Tube near the IN connector, and it uses the first three channels of the Tube. The Tube start address is the next address from the previous tube in the daisy chain.

Pixel n	Control Channel Number
R	Tube start address + 3(n-1)
G	Tube start address + 3(n-1) + 1
B	Tube start address + 3(n-1) + 2
Where: n is pixel number along the Tube. (Pixel 1 is located at end, near the IN connector.)	

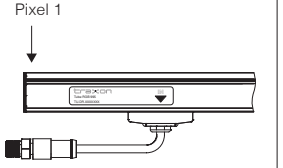


FIG 4: Media Tube RGB System Connection Example 1

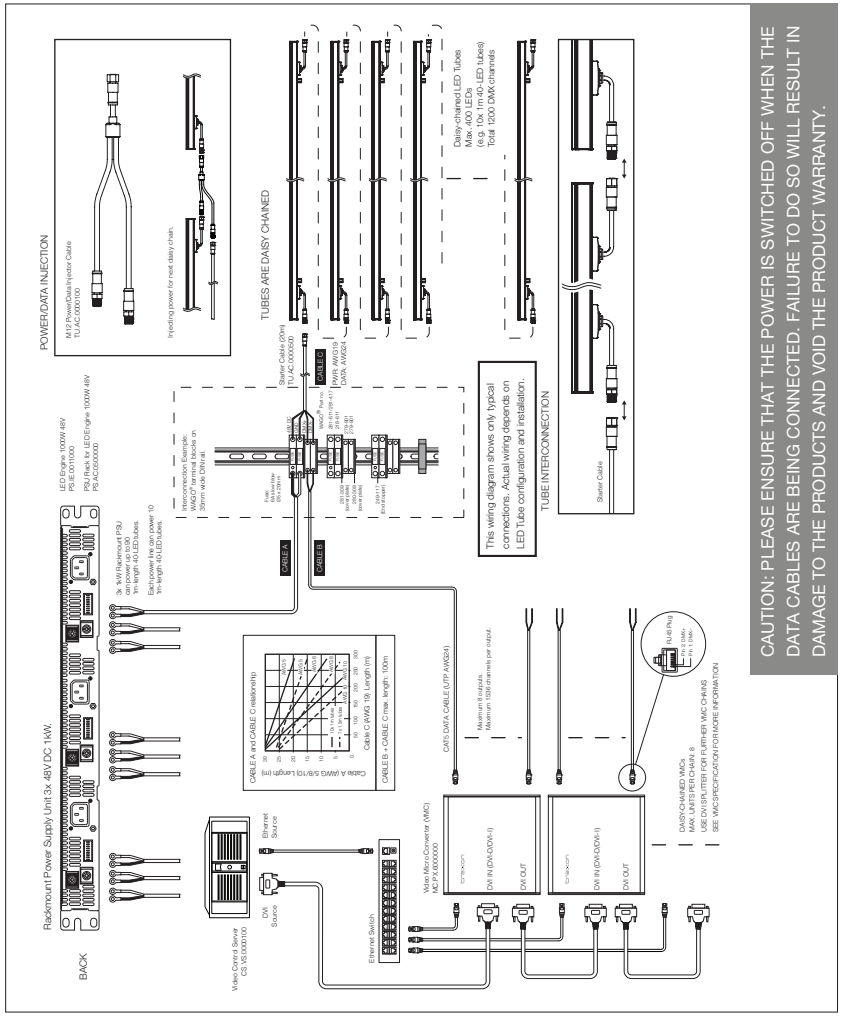
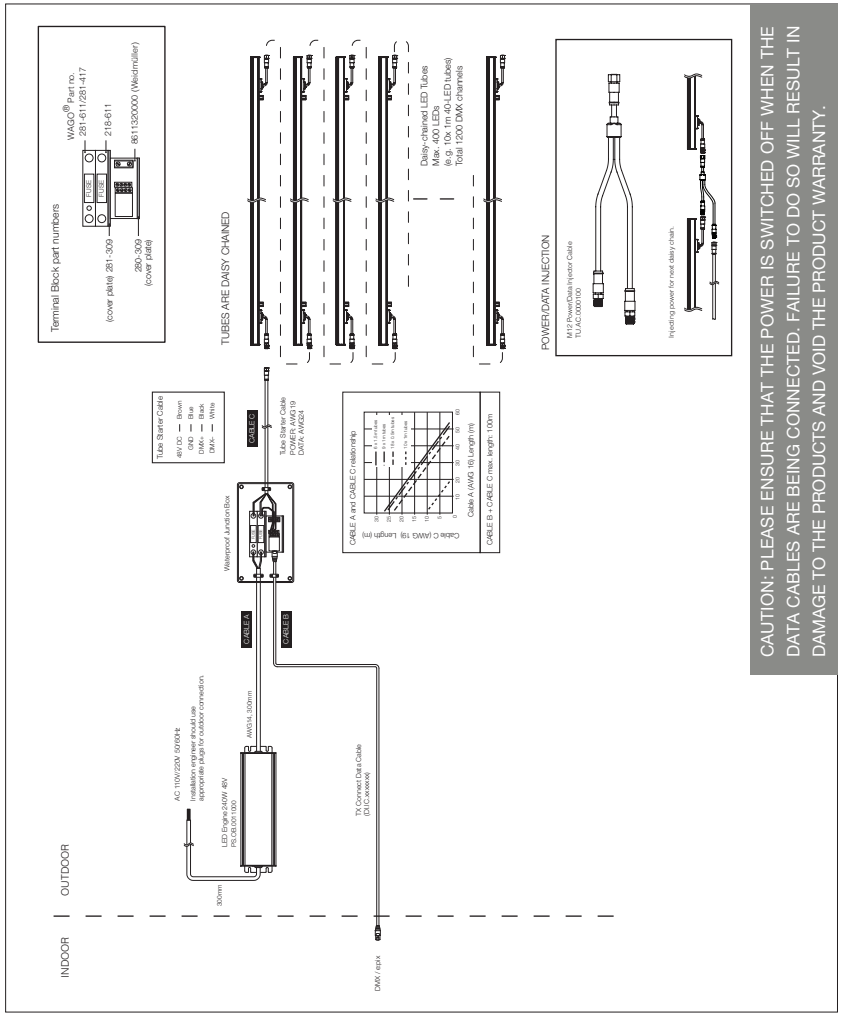


FIG 5: Media Tube RGB System Connection Example 2



6. CARE AND MAINTENANCE

Traxon™ products are of superior design and quality and should be treated with care. The recommendations below will help fulfill and warranty obligations and gain good use and longevity from the products.

- Do not attempt or use the product(s) until you read and understand the installation instructions. Failure to adhere to these instructions could result in serious injury or property damage.
- Do not use product(s) if cables are damaged.
- Do not connect cables and connectors when wet or in wet area. Moisture on bare connectors can cause electric shock and damage to product(s).
- Do not use product(s) in extreme heat environment. Ensure there is sufficient airflow and use cool air circulation if required.
- Do not drop, knock, or shake product(s). Rough handling can damage the electronics and void the warranty.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean products. Wipe with a damp cloth on housings and a dry cloth on electronics to remove dirt or dust.
- Do not attempt to service or repair the product(s) unless done by an authorized service personnel. Contact your the local Traxon™ office or distributor for details.

If the product is not working correctly, please contact your nearest authorized service centre or Traxon Technologies office for assistance.

7. TECHNICAL SPECIFICATION

Color Range:	16.7 million additive RGB colors with variable intensity
Light Source:	20 / 40 / 60 Ultra Bright RGB SMD LED
Beam Angle:	120° (direct view)
Power Input*:	48V DC
Power Consumption:	11W max. / 22W max. / 33W max.
Weight:	0.8kg / 1.6kg / 2.3kg (direct view)
	0.65kg / 1.3kg / 1.95kg (diffused)
Operating Temperature:	–30°C to 50°C (–22°F to 122°F)

*For use with TRAXON LED Engine 1000W 48V (PS.IE.0011000/PS.IE.0011100), LED Engine 240W 48V Outdoor (PS.OB.0011000) power units.

As with all electronic devices, LED output degrades over time - a term called lumen depreciation. This also explains why it is nearly impossible to expect photometric performances of two LED products with different service life spans to be the same. The rate of LED degradation is a complex function of many factors such as operating efficiency, duration of continuous operation, and operating conditions (e.g. ambient temperature).

Because LEDs are semiconductor devices, their performances are subject to inherent variability commonly found in semiconductor industry. To improve consistency in performance across the same product. LED manufacturers “sort” LEDs into bins according to different preset parameters, such as forward driving voltage, illumination, etc. Whereas binning is a sorting function, it is not a correction process. Inherent variability in the manufacturing process results always in different binning distributions according to different production lots. Traxon uses automatically binned LEDs on its products, thereby minimizing output variations within the model range.

8. WARRANTY STATEMENT

Traxon warrants its Products against material or workmanship defects for a period of two (2) years from date of purchase, provided that the purchased items are used under the conditions stated in this user manual.

Please refer to the Product Warranty section under www.traxontechnologies.com/terms for warranty terms and conditions.